Claims

1.   A method of determining the propagation delay over
a router controlled IP network intended to provide a
segment of a telephone circuit for carrying information
between at least two subscriber terminals, the method
comprising:
    reacting to a request for a telephone circuit
between said two subscribers by transmitting a voice
packet containing an echo request message over the
router controlled IP network from a first network node
to a second network node;
    reacting to receipt of the echo request message at
the second network node by transmitting a voice packet
containing an echo reply message over the router
controlled IP network from the second network node to
the first network node; and
    and determining the round trip propagation delay
for the router controlled IP network segment on the
basis of the time which elapses between sending the echo
request message from the first node and receiving the
echo reply message also at the first node.

2.   A method according to claim 1 and comprising
determining the propagation delay for the router
controlled IP network segment prior to the sending of an
Initial Address Message (IAM) over the router controlled
IP network segment.

3.   A method according to claim 2 and comprising
appending or adding the determined round trip delay to
delays determined for preceding circuit segments and
defined in the IAM, for transmission over the router
controlled IP network.

4.   Apparatus for determining the propagation delay
over a router controlled IP network intended to provide
a segment of a telephone circuit for carrying
information between at least two subscriber terminals,
the apparatus comprising:

a first router controlled IP network node coupled
between a first subscriber and the router controlled IP
network and arranged to react to a request for a
telephone circuit between said two subscribers by
transmitting a voice packet containing an echo request
message over the router controlled IP network to a
second router controlled IP network node;

the second node being arranged to react to receipt
of the echo request message by transmitting a voice
packet containing an echo reply message over the router
controlled IP network to the first network node; and

processing means associated with the first network
node arranged to determine the round trip propagation
delay for the router controlled IP network segment on
the basis of the time which elapses between sending the
echo request message from the first node and receiving
the echo reply message also at the first node.